

Mirror ES Variable Optical Attenuator (Bright Type)

Description

Broadex Technologies offers an electrostatically actuated VOA with a mirror type mechanism that is extremely compact and easy to integrate into any optical network. This thermally actuated VOA is available in both bright and dark configurations and features very low insertion loss and polarization dependent loss along with high dynamic range and high off-state extinction. The hermetically sealed packaging is highly insensitive to shock and vibration and is ESD safe up to 500V.

Broadex Technologies Mirror ES VOA is ideal for receiver protection or transponder power control, and it is also widely used in EDFAs for power equalization of all channels in multi-channel systems.

Features

- Compact size
- Ultra-fast tuning speed
- Extremely low power consumption
- Low insertion loss
- Hermetically sealed MEMS chip
- Compliance with Telcordia GR-468-CORE
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Applications

- Optical network power management
- Gain-tilt control in EDFA
- Receiver protection
- Channel on/off switching
- Mux and Demux module, OADM node



Specifications

Optical Specifications

Parameters	Min	Typical	Max	Units
Attenuation type	Electrostatic / Bright			
Operating Wavelength Range	1530		1570	nm
	1570		1610	nm
Insertion Loss ¹		0.6	0.8	dB
Threshold @IL +0.2dB			2	V
Attenuation Range		38		dB
Attenuation slope			20	dB/V
Polarization Dependent Loss ¹	0dB~10dB		0.25	dB
	10dB~20dB		0.35	dB
Wavelength Dependence of Attenuation	0dB~10dB ²		0.4	dB
	10dB~20dB ³		1.0	dB
TDL@0-20dB			2.0	dB
Resolution		0.1		dB
Repeatability		0.1		dB
Return Loss	50			dB
Response Time			5	ms
Optical Power			27	dBm
Operating Temperature Range	-5		70	°C
Storage Temperature Range	-40		85	°C

Electrical Specifications

Parameters	Min	Typical	Max	Units
Control Voltage	0		6.5	v
Voltage damage threshold			7	V
Resistance	1			MOhm
Power Supply			10	mW
ESD Damage	500			V

¹ Operation from 1290~1310nm adds 0.1dB

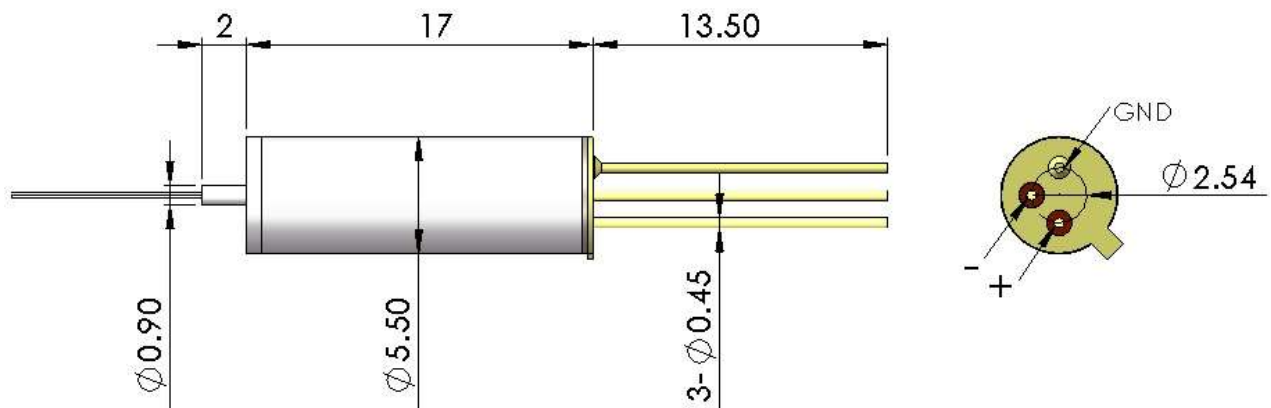
² Operation from 1290~1310nm adds 0.3dB

³ Operation from 1290~1310nm adds 0.4dB

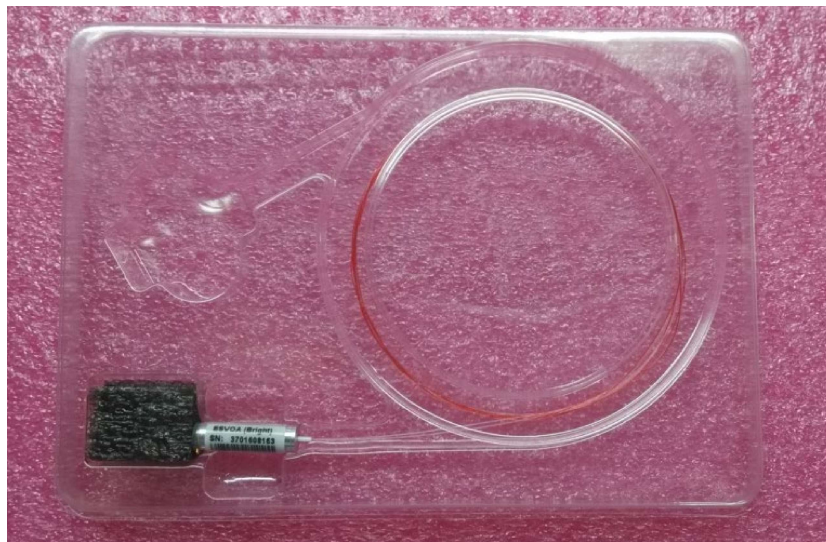
Mechanical Specification

Parameters	description
Package Dimension	Φ5.5x17 mm
Fiber Type	ITU-T G.652.D Compliant, the input port fiber marked red

Mechanical Drawing



Packaging



Contact Us

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